

**NORTHEAST OHIO FOUR COUNTY REGIONAL
PLANNING AND DEVELOPMENT ORGANIZATION**

**YELLOW CREEK
WATERSHED ACTION PLAN**

Final Report
March 2004

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Preface

The Yellow Creek is one of only two remaining high water quality tributaries of the Cuyahoga River. The Yellow Creek Watershed is also among the fastest growing and developing subbasins of the Cuyahoga River Watershed. The development and growth of the region have created various environmental concerns. The health and vitality of the watershed are being challenged by numerous outside forces. These pressures have brought about the need for a plan of action.

The Yellow Creek Watershed Action Plan defines strategies that communities within the watershed could adopt to improve water quality and storm water management. The Plan includes nine goals and numerous objectives that, if achieved, should lead to a higher level of environmental quality and a preservation of important natural resources. The actions in the Plan are methods by which to achieve the objectives. Each action includes corresponding columns for involved stakeholders, TMDL recommendations and actions, potential funding sources, expected results, and evaluation indices. The Action Plan prescribes alternative options of varying expense and complexity.

The Action Plan provides a framework for future protection and remediation activities. The Plan promulgates the principles endorsed by the Yellow Creek Watershed Storm Water Management Consortium. The Plan advocates goals consistent with those of the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) Phase II regulations, the Section 319 program, and the Lower Cuyahoga River Watershed Total Maximum Daily Load (TMDL).

The Action Plan targets specific locations within the watershed. The highlighted priority areas represent locations of prime concern in the watershed. Priority area numbers are included merely for map reference. The numbers do not denote any type of ranking or concern level.

The goal of the Action Plan is to provide for the communities and citizens a detailed and organized blueprint of strategies to improve the Yellow Creek Watershed. The Plan pinpoints specific areas of concern and defines possible remedies.

Yellow Creek Watershed Action Plan Goals

- Goal 1: Restore riparian corridors
- Goal 2: Educate watershed stakeholders about best management practices to protect water quality
- Goal 3: Maintain and protect potential groundwater recharge areas
- Goal 4: Recognize and address areas that have highly erodible soils
- Goal 5: Reduce imperviousness
- Goal 6: Protect current forested areas and promote additional tree planting
- Goal 7: Adopt conservation development practices
- Goal 8: Increase the understanding, awareness, participation, and cooperation among all stakeholders regarding watershed and water quality issues
- Goal 9: Establish a storm water utility for the communities within the watershed

Sources

1. Census 2000 TIGER data, ESRI
2. Map and Geographic Information Collection (MAGIC) geospatial data, 2000
3. *Medina County Soil Survey*, 1974
4. Ohio Environmental Protection Agency, Division of Surface Water, *Total Maximum Daily Loads for the Lower Cuyahoga River*, Final Report, 2003
5. OhioView Consortium satellite data
6. Scientific Outreach and Applications using Remote Sensing (SOARS) geospatial data, 2003
7. Summit County Department of Community and Economic Development, Summit County orthophotos, 2000
8. *Summit County Soil Survey*, 1974
9. U.S. Geological Survey geospatial data
10. *Yellow Creek Watershed Action Plan*, Northeast Ohio Four County Regional Planning and Development Organization, 2001

Possible Funding Sources

1. **CWSRF** - Clean Water State Revolving Fund
2. **Five-Star Grant** - National Fish and Wildlife Foundation Five Star Restoration Matching Grant
3. **GLPF** - Great Lakes Protection Fund
4. **LEPF** - Lake Erie Protection Fund
5. **Ohio EPA** - CWA Section 319 NPS
6. **PL-566** - Watershed Protection and Flood Prevention Act
7. **RCA** - Rural Community Assistance Program
8. **Tree Planting** - Ohio Bicentennial Legacy Tree Planting Initiative
9. **WAWA** - Watershed Awareness to Watershed Action Grant
10. **WPCLF** - Water Pollution Control Loan Fund
11. **WRRSP** - Wetlands and Water Resources and Restoration

Yellow Creek Watershed Action Plan					
Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (<i>see page 4 for complete title</i>)	Expected Improvement(s)	Evaluation
Goal 1: Restore riparian corridors					
Objective 1.1: Educate riparian landowners to avoid mowing/landscaping directly to stream bank to allow reestablishment of natural vegetation					
Priority Areas:					
▪ Entire Watershed					
a. Distribute brochures explaining riparian corridors, explaining their importance and the benefits of their preservation	▪ Action #3: educational programs of the entire Lower Cuyahoga River TMDL area	▪ Riparian landowners ▪ SWCD ▪ NEFCO ▪ All communities in watershed	▪ Ohio EPA ▪ WRRSP ▪ WPCLF ▪ CWSRF ▪ GLPF ▪ LEPF ▪ PL-566 ▪ Five-Star Grant	▪ Riparian landowners informed about the consequences and volatility of under-vegetated and exposed stream banks	▪ Number of brochures distributed
b. Hold public meeting to discuss alternative methods of lawn management in riparian areas	▪ Action #3: educational programs of the entire Lower Cuyahoga River TMDL area	▪ Riparian landowners ▪ SWCD ▪ NEFCO ▪ All communities in watershed	▪ Ohio EPA ▪ WRRSP ▪ WPCLF ▪ CWSRF ▪ GLPF ▪ PL-566 ▪ Five-Star Grant	▪ Riparian landowners informed of appropriate lawn care practices and riparian vegetation restoration	▪ Meeting attendance ▪ Participation, comments, questions, and suggestions generated at meeting
c. Organize field trip of watershed to visit examples of good and poor areas of riparian corridor management	▪ Action #3: educational programs of the entire Lower Cuyahoga River TMDL area	▪ Riparian landowners ▪ SWCD ▪ NEFCO ▪ All communities in watershed	▪ Ohio EPA ▪ WRRSP ▪ WPCLF ▪ CWSRF ▪ GLPF ▪ LEPF ▪ PL-566 ▪ Five-Star Grant	▪ Riparian landowners learn appropriate lawn care practices and riparian vegetation restoration ▪ Watershed residents able to see examples of healthy and unhealthy riparian habitats	▪ Field trip attendance ▪ Number of sites visited ▪ Participation, comments, questions, and suggestions generated during field trip
d. Create a Yellow Creek Watershed educational web site including riparian corridor information	▪ Action #3: educational programs of the entire Lower Cuyahoga River TMDL area	▪ Riparian landowners ▪ Watershed residents ▪ SWCD ▪ NEFCO ▪ All communities in watershed	▪ Ohio EPA ▪ WRRSP ▪ WPCLF ▪ CWSRF ▪ GLPF ▪ LEPF ▪ PL-566 ▪ Five-Star Grant	▪ Increased understanding of riparian habitats ▪ Riparian landowners informed of appropriate lawn care practices and riparian vegetation restoration methods	▪ Number of visits to web site ▪ Comments, questions, suggestions, and other feedback sent to web site
Goal 1: Restore riparian corridors					
Objective 1.2: Restore Stream Channel					
Priority Areas: Subwatershed 36			▪ Bath Creek, north of Everett Rd. [34] Subwatershed 38		

* bold number in brackets, **[1]**, indicates ID number on map

Yellow Creek Watershed Action Plan

Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (<i>see page 4 for complete title</i>)	Expected Improvement(s)	Evaluation
<ul style="list-style-type: none"> ▪ West Fork, west of State Rd. [6] ▪ West Fork tributary, west of State Rd. [7] ▪ West Fork, east of Dunsha Rd. [8] ▪ South Fork at Swan Lake Rd. [9] ▪ South Fork at State Route 18 [13] ▪ West Fork at Heatherleigh Dr. [19] ▪ West Fork, Shaw Rd. to Crystal Lake Rd. [23] Subwatershed 37 ▪ Bath Creek, south of Bath Rd. [27] ▪ Bath Creek, Ira Rd. south to Derrwood Dr. [30] ▪ North Fork, near Cleveland-Massillon Rd./R.B. Stout Property [38] ▪ North Fork tributary, west of Cleveland-Massillon Rd. [40] ▪ North Fork, south of Ira Rd. [41] ▪ North Fork, south of Hawkins Rd., east of Roberts Dr. [49] ▪ North Fork, confluence with Yellow Creek [61] Subwatershed 39 ▪ Sourek Run, adjacent to Lake of the Woods Dr. [52] ▪ Yellow Creek, east of I-77 [58] ▪ Yellow Creek, at Yellow Creek Rd. [63] ▪ Yellow Creek, north of Bath Rd. [67] 					
a. Reconstruct stream segments to original meandering course	▪ Action #9: riparian protection of the Cuyahoga River and tributaries	<ul style="list-style-type: none"> ▪ Riparian landowners ▪ Affected communities ▪ SWCD 	<ul style="list-style-type: none"> ▪ Ohio EPA ▪ WRRSP ▪ WPCLF ▪ CWSRF ▪ GLPF ▪ LEPF ▪ PL-566 ▪ Five-Star Grant 	<ul style="list-style-type: none"> ▪ Restoration of natural course of channelized stream ▪ Restoration of natural wetlands adjacent to meandering stream 	▪ Linear feet of restoration
b. Distribute brochures detailing what individual riparian landowners can do to restore natural stream channel	▪ Action #3: educational programs of the entire Lower Cuyahoga River TMDL area	<ul style="list-style-type: none"> ▪ Riparian landowners ▪ Affected communities ▪ SWCD ▪ NEFCO 	<ul style="list-style-type: none"> ▪ Ohio EPA ▪ WRRSP ▪ WPCLF ▪ CWSRF ▪ GLPF ▪ LEPF ▪ PL-566 ▪ Five-Star Grant 	▪ Riparian landowners informed of ways to rehabilitate riparian corridors	▪ Number of brochures distributed
c. Encourage landowners to donate conservation easements to protect the future integrity of their land	▪ Action #9: riparian protection of the Cuyahoga River and tributaries	<ul style="list-style-type: none"> ▪ Riparian landowners ▪ Affected communities ▪ Medina Summit Land Conservancy ▪ SWCD ▪ NEFCO 		▪ Donated property ensures future protection of land from development and deforestation	▪ Total number of acres donated as conservation easement
▪ Conduct workshop emphasizing specific methods of stream and riparian restoration	▪ Action #3: educational programs of the entire Lower Cuyahoga River	<ul style="list-style-type: none"> ▪ Riparian landowners ▪ Affected communities ▪ SWCD 	<ul style="list-style-type: none"> ▪ Ohio EPA ▪ WRRSP ▪ WPCLF ▪ CWSRF ▪ GLPF 	▪ Riparian landowners provided with hands-on training on restoring riparian stream corridors	<ul style="list-style-type: none"> ▪ Workshop attendance ▪ Comments, questions, suggestions, and other feedback generated at workshop

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Yellow Creek Watershed Action Plan

Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (<i>see page 4 for complete title</i>)	Expected Improvement(s)	Evaluation
	TMDL area	<ul style="list-style-type: none"> NEFCO 	<ul style="list-style-type: none"> LEPF PL-566 Five-Star Grant 		
d. Organize field trip of watershed to visit examples of good and poor areas of riparian corridor management	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Riparian landowners Affected communities SWCD NEFCO 	<ul style="list-style-type: none"> Ohio EPA WRRSP WPCLF CWSRF GLPF LEPF PL-566 Five-Star Grant 	<ul style="list-style-type: none"> Field trip attendees see examples of both healthy and unhealthy riparian stream corridors Field trip attendees learn ways to restore riparian stream corridors 	<ul style="list-style-type: none"> Field trip attendance Number of sites visited Comments, questions, suggestions, and other feedback generated at workshop
e. Create a Yellow Creek Watershed educational web site including riparian corridor information and illustrating stream restoration projects	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Riparian landowners Watershed residents All communities in watershed SWCD NEFCO 	<ul style="list-style-type: none"> Ohio EPA WRRSP WPCLF CWSRF GLPF LEPF PL-566 Five-Star Grant 	<ul style="list-style-type: none"> Increased understanding of the benefits, functions, and importance of riparian habitats Explanation and illustrations of stream restoration projects 	<ul style="list-style-type: none"> Number of visits to web site Comments, questions, suggestions, and other feedback sent to web site
f. Organize a stream clean-up/stream planting event	<ul style="list-style-type: none"> Action #9: riparian protection of the Cuyahoga River and tributaries 	<ul style="list-style-type: none"> Riparian landowners Watershed residents Affected communities SWCD NEFCO 	<ul style="list-style-type: none"> Ohio EPA WRRSP WPCLF CWSRF GLPF LEPF PL-566 Five-Star Grant 	<ul style="list-style-type: none"> Opportunity for participants to actively contribute to restoring a stream corridor Illustration of how a community can work cooperatively to protect and restore a stream and benefit the entire watershed 	<ul style="list-style-type: none"> Event attendance Number of plants planted
Goal 1: Restore riparian corridors					
Objective 1.3: Plant additional vegetation along riparian corridors					
Priority Areas: Subwatershed 36 <ul style="list-style-type: none"> West Fork, west of State Rd. [6] West Fork tributary, west of State Rd. [7] West Fork, east of Dunsha Rd. [8] South Fork at Swan Lake Rd. [9] South Fork at State Route 18 [13] West Fork at Heatherleigh Dr. [19] 			<ul style="list-style-type: none"> Bath Creek, north of Everett Rd. [34] Subwatershed 38 <ul style="list-style-type: none"> North Fork, near Cleveland-Massillon Rd./R.B. Stout Property [38] North Fork tributary, west of Cleveland-Massillon Rd. [40] North Fork, south of Ira Rd. [41] North Fork, south of Hawkins Rd., east of Roberts Dr. [49] North Fork, confluence with Yellow Creek [61] Subwatershed 39		

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<ul style="list-style-type: none"> ▪ West Fork, Shaw Rd. to Crystal Lake Rd. [23] Subwatershed 37 ▪ Bath Creek, south of Bath Rd. [27] ▪ Bath Creek, Ira Rd. south to Derrwood Dr. [30] 					
<ul style="list-style-type: none"> ▪ Sourek Run, adjacent to Lake of the Woods Dr. [52] ▪ Yellow Creek, east of I-77 [58] ▪ Yellow Creek, at Yellow Creek Rd. [63] ▪ Yellow Creek, north of Bath Rd. [67] 					
a. Distribute brochures to riparian landowners, listing appropriate trees and shrubs for stream bank re-vegetation	▪ Action #3: educational programs of the entire Lower Cuyahoga River TMDL area	<ul style="list-style-type: none"> ▪ Riparian landowners ▪ Affected communities ▪ SWCD ▪ NEFCO 	<ul style="list-style-type: none"> ▪ Ohio EPA ▪ WRRSP ▪ WPCLF ▪ CWSRF ▪ GLPF ▪ LEPF ▪ PL-566 ▪ Five-Star Grant 	<ul style="list-style-type: none"> ▪ Riparian landowners informed of the appropriate plants for riparian restoration ▪ Inspiration for residents to take initiative and plant additional vegetation along riparian corridors 	<ul style="list-style-type: none"> ▪ Number of brochures distributed
b. Provide riparian landowners with trees and shrubs for planting along stream banks	▪ Action #9: riparian protection of the Cuyahoga River and tributaries	<ul style="list-style-type: none"> ▪ Riparian landowners ▪ Affected communities ▪ SWCD 	<ul style="list-style-type: none"> ▪ Ohio EPA ▪ WRRSP ▪ WPCLF ▪ CWSRF ▪ GLPF ▪ LEPF ▪ PL-566 ▪ Five-Star Grant 	<ul style="list-style-type: none"> ▪ Provision of trees and shrubs for replanting ▪ Restoration of under-vegetated riparian areas ▪ Reduction in erosion, sedimentation, and flood damage, and nonpoint source pollution ▪ Regulation of stream water temperature ▪ Improved aquatic habitat ▪ Opportunity for riparian landowners to actively restore streams 	<ul style="list-style-type: none"> ▪ Number of riparian landowners provided with trees and shrubs ▪ Total number of trees and shrubs distributed to riparian landowners ▪ Linear feet of riparian corridor replanted
c. Enlist riparian landowners to participate in 'bufferscaping' program by planting native trees and shrubs in their backyards	▪ Action #9: riparian protection of the Cuyahoga River and tributaries	<ul style="list-style-type: none"> ▪ Riparian landowners ▪ Affected communities ▪ SWCD ▪ NEFCO 	<ul style="list-style-type: none"> ▪ Ohio EPA ▪ WRRSP ▪ WPCLF ▪ CWSRF ▪ GLPF ▪ LEPF ▪ PL-566 ▪ Five-Star Grant 	<ul style="list-style-type: none"> ▪ Increase the riparian buffer width ▪ Actively involve interested residents in the stewardship of a riparian buffer and stream ▪ Reduction in nonpoint source pollution 	<ul style="list-style-type: none"> ▪ Number of riparian landowners enrolled in bufferscaping program ▪ Total number of additional trees/ shrubs planted ▪ Total linear feet of stream replanted
d. Create a Yellow Creek Watershed educational web site including riparian corridor information and	▪ Action #3: educational programs of the entire Lower Cuyahoga River	<ul style="list-style-type: none"> ▪ Riparian landowners ▪ Watershed residents ▪ All communities 	<ul style="list-style-type: none"> ▪ Ohio EPA ▪ WRRSP ▪ WPCLF ▪ CWSRF ▪ GLPF 	<ul style="list-style-type: none"> ▪ Increased understanding of riparian habitats ▪ Explanation and illustrations of stream restoration projects 	<ul style="list-style-type: none"> ▪ Number of visits to web site ▪ Comments, questions, suggestions, and other feedback sent to web site

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illustrating stream restoration projects	TMDL area	<ul style="list-style-type: none"> in watershed SWCD NEFCO 	<ul style="list-style-type: none"> LEPF PL-566 Five-Star Grant 		
e. Conduct workshop/ seminar focusing on the trees and shrubs appropriate for replanting along a riparian corridor	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Riparian landowners All communities in watershed SWCD 	<ul style="list-style-type: none"> Ohio EPA WRRSP WPCLF CWSRF GLPF LEPF PL-566 Five-Star Grant 	<ul style="list-style-type: none"> Riparian landowners provided with hands-on training on replanting riparian stream corridors and education on proper plants for re-vegetation 	<ul style="list-style-type: none"> Workshop attendance Comments, questions, suggestions, and other feedback generated at workshop
f. Organize school projects for replanting riparian corridors	<ul style="list-style-type: none"> Action #9: riparian protection of the Cuyahoga River and tributaries 	<ul style="list-style-type: none"> Local schools in watershed NEFCO SWCD All communities in watershed 	<ul style="list-style-type: none"> Ohio EPA WRRSP WPCLF CWSRF GLPF LEPF PL-566 Five-Star Grant 	<ul style="list-style-type: none"> Opportunity for students to revitalize stream corridors and take an active role in bettering the watershed and community 	<ul style="list-style-type: none"> Participation in school event Total number of plantings
Goal 2: Educate watershed stakeholders about best management practices (BMPs) to protect water quality					
Objective 2.1: Organize a comprehensive educational program emphasizing storm water management					
Priority Areas:					
<ul style="list-style-type: none"> Entire watershed 					
a. Develop and distribute brochures detailing household BMPs	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA WRRSP WPCLF CWSRF GLPF LEPF PL-566 Five-Star Grant 	<ul style="list-style-type: none"> Residents informed about basic storm water management concepts Community residents conscious of household BMPs 	<ul style="list-style-type: none"> Number of brochures distributed
b. Educate homeowners to direct downspouts into vegetated area, away from septic system, impervious surface, and home	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA WRRSP WPCLF CWSRF GLPF LEPF PL-566 	<ul style="list-style-type: none"> Reduction in total runoff Promotion of infiltration 	<ul style="list-style-type: none"> Number of brochures distributed Number of downspouts redirected

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Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (<i>see page 4 for complete title</i>)	Expected Improvement(s)	Evaluation
c. Hold public meeting to discuss watershed issues and household storm water BMPs	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA WRRSP WPCLF CWSRF GLPF LEPF PL-566 	<ul style="list-style-type: none"> Citizens informed of basic storm water management concepts Community residents conscious of household BMPs 	<ul style="list-style-type: none"> Meeting attendance Comments, questions, suggestions, and other feedback generated at meeting
d. Hold workshop/seminar for developers and builders on Phase II regulations and storm water management BMPs	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Builders, developers Home Builders Association NEFCO SWCD County Engineer All communities in watershed 	<ul style="list-style-type: none"> Ohio EPA WRRSP WPCLF CWSRF GLPF LEPF PL-566 	<ul style="list-style-type: none"> Builders and developers learn Phase II regulations and storm water management BMPs 	<ul style="list-style-type: none"> Workshop attendance Comments, questions, suggestions, and other feedback generated at workshop
e. Organize a field trip of the watershed to illustrate the use of storm water management BMPs	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA WRRSP WPCLF CWSRF GLPF LEPF PL-566 Five-Star Grant 	<ul style="list-style-type: none"> Opportunity for attendees to visit specific sites where BMPs have been employed 	<ul style="list-style-type: none"> Field trip attendance Comments, questions, suggestions, and other feedback generated during field trip
f. Create a Yellow Creek Watershed educational web site including information regarding storm water management BMPs	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA WRRSP WPCLF CWSRF GLPF LEPF PL-566 	<ul style="list-style-type: none"> Increased understanding of storm water management BMPs Explanation and illustrations of proper techniques and activities 	<ul style="list-style-type: none"> Number of web site visits Comments, questions, suggestions, and other feedback sent to web site
Goal 2: Educate watershed stakeholders about best management practices (BMPs) to protect water quality					
Objective 2.2: Maintain vegetated roadside drainage ditches					
Priority Areas:					
<ul style="list-style-type: none"> Entire watershed 					
a. Distribute brochures to watershed residents explaining the importance of	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower 	<ul style="list-style-type: none"> Watershed residents All communities in watershed 	<ul style="list-style-type: none"> Ohio EPA WRRSP WPCLF CWSRF 	<ul style="list-style-type: none"> Residents informed of importance of natural drainage conveyance Increased likelihood of 	<ul style="list-style-type: none"> Number of brochures distributed

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maintaining roadside drainage ditches	Cuyahoga River TMDL area	<ul style="list-style-type: none"> NEFCO SWCD County Engineer 	<ul style="list-style-type: none"> GLPF LEPF PL-566 	proper maintenance and protection of existing drainage ditches	
b. Protect and maintain grassed and vegetated roadside drainage ditches/swales	<ul style="list-style-type: none"> Action #2: Phase II Storm water programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed SWCD County Engineer 	<ul style="list-style-type: none"> Ohio EPA WRRSP WPCLF CWSRF GLPF LEPF PL-566 	<ul style="list-style-type: none"> Promotion of natural storm water conveyance Promotion of infiltration Reduction in storm water runoff 	<ul style="list-style-type: none"> Continued maintenance of existing ditches and swales
c. Retrofit curbed subdivisions with grassed roadside drainage ditch/swale	<ul style="list-style-type: none"> Action #2: Phase II Storm water programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed SWCD County Engineer 	<ul style="list-style-type: none"> Ohio EPA WRRSP WPCLF CWSRF GLPF LEPF PL-566 	<ul style="list-style-type: none"> Promotion of natural storm water conveyance Promotion of infiltration Reduction in storm water runoff 	<ul style="list-style-type: none"> Number of curbs retrofitted to grassed drainage ditches
Goal 3: Maintain and protect potential groundwater recharge areas					
Objective 3.1: Protect forested areas of potential groundwater recharge					
Priority Areas: Subwatershed 36 <ul style="list-style-type: none"> State Route 18, west of State Rd. [4] Swan Lake Dr. [10] State Route 18, south to Westmont Dr. [11] Idlebrook Dr. [15] Rolling View Dr./Melody Dr. [16] Subwatershed 38 <ul style="list-style-type: none"> Barnsleigh Dr. [18] Lois Rd./Hametown Rd. [21] Subwatershed 39 <ul style="list-style-type: none"> North Fork, west of Cleveland-Massillon Rd. [39] Sourek Rd./Berrywood Dr. [55] North side of Ghent Rd. [56] 					
a. Distribute brochures to homeowners explaining the importance and benefits of forest/ woodland preservation on private property	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA RCA PL-566 	<ul style="list-style-type: none"> Landowners informed of the importance of maintaining wooded areas Landowners educated on the importance of groundwater recharge 	<ul style="list-style-type: none"> Number of brochures distributed
b. Provide landowners with trees for planting on property		<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA RCA WAWA Tree Planting PL-566 	<ul style="list-style-type: none"> Augmentation of natural groundwater recharge areas Opportunity for residents to take an active role in bettering the watershed 	<ul style="list-style-type: none"> Number of trees replanted Number of properties participating in program Total amount of funds procured for additional planting

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c. Conduct workshop for watershed residents, explaining groundwater recharge and forest cover	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA RCA WAWA PL-566 	<ul style="list-style-type: none"> Landowners learn the importance of maintaining wooded property Landowners educated on the importance of groundwater recharge 	<ul style="list-style-type: none"> Workshop attendance Participation, comments, questions, and suggestions generated at workshop
d. Organize a field trip of watershed to visit forested groundwater recharge areas	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA WAWA RCA PL-566 	<ul style="list-style-type: none"> Opportunity for watershed residents to visit and see examples of wooded, groundwater recharge areas 	<ul style="list-style-type: none"> Field trip attendance Participation, comments, questions, and suggestions generated during field trip
e. Create a Yellow Creek Watershed educational web site including information regarding groundwater recharge and forest resources	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA PL-566 	<ul style="list-style-type: none"> Increased understanding of groundwater recharge Explanation and illustrations of wooded groundwater recharge areas 	<ul style="list-style-type: none"> Number of web site visits Comments, questions, suggestions, and other feedback sent to web site
Goal 3: Maintain and protect potential groundwater recharge areas					
Objective 3.2: Restore unforested areas of potential groundwater recharge					
Priority Areas: Subwatershed 36 <ul style="list-style-type: none"> South of State Route 18, west of South Fork [12] South of Granger Rd., between Heatherleigh Dr. and Hametown Rd. [20] Subwatershed 38 <ul style="list-style-type: none"> Bath Rd./Cleveland-Massillon Rd. intersection [37] Everett Rd., west of North Fork [43] 					
a. Distribute brochures to homeowners explaining the importance and benefits of wooded landcover on private property	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA RCA PL-566 	<ul style="list-style-type: none"> Residents informed of the importance of maintaining wooded property Landowners educated on the importance of groundwater recharge 	<ul style="list-style-type: none"> Number of brochures distributed
b. Provide landowners with trees for planting on property		<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA RCA WAWA Tree Planting PL-566 	<ul style="list-style-type: none"> Augmentation of natural groundwater recharge areas Opportunity for residents to take an active role in bettering the watershed 	<ul style="list-style-type: none"> Number of trees replanted Number of properties participating in program Total amount of funds procured for additional planting

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Yellow Creek Watershed Action Plan

Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (<i>see page 4 for complete title</i>)	Expected Improvement(s)	Evaluation
c. Conduct workshop for watershed residents, explaining groundwater recharge and forest cover	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA RCA WAWA PL-566 	<ul style="list-style-type: none"> Landowners learn the importance of maintaining wooded property Landowners educated on the importance of groundwater recharge 	<ul style="list-style-type: none"> Workshop attendance Participation, comments, questions, and suggestions generated at workshop
d. Organize a field trip of watershed to visit forested groundwater recharge areas	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA WAWA RCA PL-566 	<ul style="list-style-type: none"> Opportunity for watershed residents to visit and see examples of wooded, groundwater recharge areas 	<ul style="list-style-type: none"> Field trip attendance Participation, comments, questions, and suggestions generated during field trip
e. Create a Yellow Creek Watershed educational web site including information regarding groundwater recharge and forest resources	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA PL-566 	<ul style="list-style-type: none"> Increased understanding of groundwater recharge Explanation and illustrations of wooded groundwater recharge areas 	<ul style="list-style-type: none"> Number of web site visits Comments, questions, suggestions, and other feedback sent to web site
Goal 4: Recognize and address areas that have highly erodible soils					
Objective 4.1: Preserve forested areas that have highly erodible soils					
Priority Areas: Subwatershed 36 <ul style="list-style-type: none"> Ridgewood Rd. [1] S. Medina Line Rd., north of Ridgewood Rd. [2] Granger Rd., north to S. Lakespur [22] Shaw Rd., east of Hametown Rd. [26] Subwatershed 37 <ul style="list-style-type: none"> Ira Rd./Hametown Rd. [31] Everett Rd., south of I-271 [35] Subwatershed 38 <ul style="list-style-type: none"> Everett Rd., east of North Fork [44] Everett Rd., west of Cleveland-Massillon Rd. [45] Subwatershed 39 <ul style="list-style-type: none"> Sourek Rd./Berrywood Dr. [55] West Point Dr./Sourek Run [57] Revere Run [66] Bath Rd./Cynthia Ln. [68] North Revere Run [69] 					
a. Distribute brochures to residents explaining erodible soils and the importance of maintaining wooded landcover	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA RCA PL-566 	<ul style="list-style-type: none"> Residents informed of the importance of maintaining wooded areas Residents aware of the consequences of under-vegetated cover on erodible soils 	<ul style="list-style-type: none"> Number of brochures distributed
b. Provide landowners with trees for planting on property		<ul style="list-style-type: none"> Watershed residents All communities 	<ul style="list-style-type: none"> Ohio EPA RCA WAWA 	<ul style="list-style-type: none"> Protection of areas vulnerable to erosion Augmentation of wooded 	<ul style="list-style-type: none"> Number of trees replanted Number of properties

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Yellow Creek Watershed Action Plan

Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (<i>see page 4 for complete title</i>)	Expected Improvement(s)	Evaluation
		<ul style="list-style-type: none"> in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Tree Planting PL-566 	landcover in areas with highly erodible soils	<ul style="list-style-type: none"> participating in program Total amount of funds procured for additional planting
c. Conduct workshop for watershed residents, explaining erodible soils and the importance of forest cover	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA RCA WAWA PL-566 	<ul style="list-style-type: none"> Residents learn about the importance of maintaining wooded areas Landowners aware of areas with erodible soils 	<ul style="list-style-type: none"> Workshop attendance Participation, comments, questions, and suggestions generated at workshop
d. Organize a field trip of watershed to visit areas with erodible soils	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA WAWA RCA PL-566 	<ul style="list-style-type: none"> Opportunity for watershed residents to visit and see examples of erodible soils areas 	<ul style="list-style-type: none"> Field trip attendance Participation, comments, questions, and suggestions generated during field trip
e. Create a Yellow Creek Watershed educational web site including information regarding erodible soils	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA PL-566 	<ul style="list-style-type: none"> Increased understanding of erodible soils Explanation and illustrations of erodible soils 	<ul style="list-style-type: none"> Number of web site visits Comments, questions, suggestions, and other feedback sent to web site
Goal 4: Recognize and address areas that have highly erodible soils					
Objective 4.2: Restore unforested areas that have highly erodible soils					
Priority Areas: Subwatershed 36 <ul style="list-style-type: none"> State Route 18, west of S. Medina Line Rd. [3] State Route 18/N. Medina Line Rd./Dunsha Rd. [5] Hughstowne Dr. [25] Subwatershed 37 <ul style="list-style-type: none"> Bath Nature Preserve, open fields east of Bath Pond [28] Hametown Rd., south of Ira Rd. [29] Subwatershed 38 <ul style="list-style-type: none"> North of Ira Rd., east of the North Fork [42] North of Ira Rd., west of North Fork [43] Subwatershed 39 <ul style="list-style-type: none"> Wye Rd./Sanctuary Rd. [59] Round Hill Dr. [65] Revere Rd./Brookview Dr. [70] 					
a. Distribute brochures to residents explaining erodible soils and the consequences of under-vegetation on these areas	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA RCA PL-566 	<ul style="list-style-type: none"> Landowners informed of the importance of maintaining wooded areas Residents aware of the consequences of under-vegetated cover on erodible soils 	<ul style="list-style-type: none"> Number of brochures distributed

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Yellow Creek Watershed Action Plan					
Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (see page 4 for complete title)	Expected Improvement(s)	Evaluation
b. Provide landowners with trees for planting on property		<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA RCA WAWA Tree Planting PL-566 	<ul style="list-style-type: none"> Restoration of unforested areas vulnerable to erosion Augmentation of wooded landcover in areas with highly erodible soils 	<ul style="list-style-type: none"> Number of trees replanted Number of properties participating in program Total amount of funds procured for additional planting
c. Conduct workshop for watershed residents, explaining erodible soils and the importance of forest cover	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA RCA WAWA PL-566 	<ul style="list-style-type: none"> Landowners learn the importance of maintaining wooded property Residents aware of areas with erodible soils 	<ul style="list-style-type: none"> Workshop attendance Participation, comments, questions, and suggestions generated at workshop
d. Organize a field trip of watershed to visit areas with erodible soils	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA WAWA RCA PL-566 	<ul style="list-style-type: none"> Opportunity for watershed residents to visit and see examples of erodible soils areas 	<ul style="list-style-type: none"> Field trip attendance Participation, comments, questions, and suggestions generated during field trip
e. Create a Yellow Creek Watershed educational web site including information regarding erodible soils	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed NEFCO SWCD 	<ul style="list-style-type: none"> Ohio EPA PL-566 	<ul style="list-style-type: none"> Increased understanding of erodible soils Explanation and illustrations of areas with erodible soils 	<ul style="list-style-type: none"> Number of web site visits Comments, questions, suggestions, and other feedback sent to web site
Goal 5: Reduce imperviousness throughout watershed					
Objective 5.1: Reduce parking lot size					
Priority Areas: Subwatershed 38 <ul style="list-style-type: none"> Bath Center [36] Brecksville Rd. trucking areas [47] Subwatershed 39			<ul style="list-style-type: none"> Summit Mall area [50] Ghent Rd. [51] Springside Dr. [53] Embassy Pkwy. [54] Ghent Village [60] 		
a. Revise local ordinances/ codes to allow for smaller parking lots with fewer spaces	<ul style="list-style-type: none"> Action #2: Phase II Storm water programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Affected communities Affected business owners County planning commission 		<ul style="list-style-type: none"> Adjusted/amended guidelines encouraging and promoting smaller parking lots Reduction in total impervious surface area 	<ul style="list-style-type: none"> Number of communities making revisions to ordinances/codes
b. Promote parking lot	<ul style="list-style-type: none"> Action #2: Phase II 	<ul style="list-style-type: none"> Affected 		<ul style="list-style-type: none"> Reduction in the need for 	<ul style="list-style-type: none"> Number of corporations

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Yellow Creek Watershed Action Plan					
Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (see page 4 for complete title)	Expected Improvement(s)	Evaluation
sharing for adjacent properties	Storm water programs of the entire Lower Cuyahoga River TMDL area	communities ▪ Affected business owners		multiple parking lots ▪ Reduction in total impervious surface area	and businesses sharing parking lots
c. Retrofit overflow and seasonal parking areas with porous pavement	▪ Action #2: Phase II Storm water programs of the entire Lower Cuyahoga River TMDL area	▪ Affected communities ▪ Affected business owners ▪ County planning commission ▪ SWCD	▪ Ohio EPA ▪ GLPF ▪ LEPF ▪ CWSRF ▪ PL-566	▪ Reduction in total impervious surface area	▪ Total square feet of porous pavement introduced
d. Conduct demonstration/ pilot project for introducing porous pavement into parking lot areas	▪ Action #2: Phase II Storm water programs of the entire Lower Cuyahoga River TMDL area	▪ Affected communities ▪ Affected business owners ▪ SWCD ▪ NEFCO	▪ Ohio EPA ▪ GLPF ▪ LEPF ▪ CWSRF ▪ PL-566	▪ Reduction in total runoff ▪ Promotion of increased infiltration ▪ Opportunity for business and commercial property owners to take active role in reducing runoff and improving storm water management	▪ Number of businesses participating in demonstration project ▪ Total square feet of porous pavement introduced
e. Distribute brochures to owners and managers of corporations about the environmental impacts of imperviousness and the alternative paving options available	▪ Action #3: educational programs of the entire Lower Cuyahoga River TMDL area	▪ Affected communities ▪ Affected business owners ▪ SWCD ▪ NEFCO	▪ Ohio EPA ▪ GLPF ▪ LEPF ▪ CWSRF ▪ PL-566	▪ Business owners aware of the options available for pervious paving	▪ Total number of brochures distributed
Goal 5: Reduce imperviousness throughout watershed					
Objective 5.2: Break up large expanses of impervious surfaces					
Priority Areas: Subwatershed 38 ▪ Bath Center [36] ▪ Brecksville Rd. trucking areas [47] Subwatershed 39			▪ Summit Mall area [50] ▪ Ghent Rd. [51] ▪ Springside Dr. [53] ▪ Embassy Pkwy. [54] ▪ Ghent Village [60]		
a. Install vegetated filter strips within large expanses of impervious	▪ Action #2: Phase II Storm water programs of the	▪ Affected communities ▪ Affected	▪ Ohio EPA ▪ GLPF ▪ LEPF	▪ Reduction in total runoff ▪ Promotion of increased infiltration	▪ Linear feet of vegetated filter strips installed

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Yellow Creek Watershed Action Plan

Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (<i>see page 4 for complete title</i>)	Expected Improvement(s)	Evaluation
surfaces	entire Lower Cuyahoga River TMDL area	business owners ▪ SWCD	▪ CWSRF ▪ PL-566		
b. Incorporate permeable paving in less-trafficked areas	▪ Action #2: Phase II Storm water programs of the entire Lower Cuyahoga River TMDL area	▪ Affected communities ▪ Affected business owners ▪ SWCD	▪ Ohio EPA ▪ GLPF ▪ LEPF ▪ CWSRF ▪ PL-566	▪ Reduction in total runoff ▪ Promotion of increased infiltration	▪ Total square feet of permeable paving installed
c. Distribute brochures to business owners and managers about the environmental impacts of imperviousness and the alternative paving options available	▪ Action #3: educational programs of the entire Lower Cuyahoga River TMDL area	▪ Affected communities ▪ Affected business owners ▪ SWCD ▪ NEFCO	▪ Ohio EPA ▪ GLPF ▪ LEPF ▪ CWSRF ▪ PL-566	▪ Business owners aware of the options available for pervious paving	▪ Total number of brochures distributed
Goal 5: Reduce imperviousness throughout watershed					
Objective 5.3: Promote and encourage the use of permeable driveway surfaces					
Priority Areas:					
▪ Entire watershed					
a. Distribute brochures to residents explaining permeable paving and providers of such materials	▪ Action #3: educational programs of the entire Lower Cuyahoga River TMDL area	▪ Watershed residents ▪ All communities in watershed ▪ NEFCO ▪ SWCD	▪ Ohio EPA ▪ GLPF ▪ LEPF ▪ CWSRF ▪ PL-566	▪ Residents informed of the importance of pervious pavers ▪ Increased likelihood of residents opting for permeable paving	▪ Total number of brochures distributed
b. Conduct demonstration/pilot project where selected homes retrofit driveways with porous pavement	▪ Action #2: Phase II Storm water programs of the entire Lower Cuyahoga River TMDL area	▪ Watershed residents ▪ All communities in watershed	▪ Ohio EPA ▪ GLPF ▪ LEPF ▪ CWSRF ▪ PL-566	▪ Reduction in total runoff ▪ Promotion of increased infiltration ▪ Opportunity for homeowners to take active role in reducing runoff and improving storm water management	▪ Total number of homeowners participating in demonstration project ▪ Total square feet of porous pavement introduced
c. Replace concrete and asphalt driveways with gravel, dirt, grass, or other permeable surface	▪ Action #2: Phase II Storm water programs of the entire Lower Cuyahoga River	▪ Watershed residents ▪ All communities in watershed ▪ NEFCO	▪ Ohio EPA ▪ GLPF ▪ LEPF ▪ CWSRF ▪ PL-566	▪ Reduction in total runoff ▪ Promotion of increased infiltration	▪ Total number of driveways reverting to permeable surfaces ▪ Total square feet of impervious surface area

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Yellow Creek Watershed Action Plan					
Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (see page 4 for complete title)	Expected Improvement(s)	Evaluation
	TMDL area	▪ SWCD			removed
Goal 5: Reduce imperviousness throughout watershed					
Objective 5.4: Reduce street widths and cul-de-sac radii					
Priority Areas:					
▪ Entire watershed					
a. Revise community zoning/engineering codes to allow for narrower streets and smaller cul-de-sacs	▪ Action #2: Phase II Storm water programs of the entire Lower Cuyahoga River TMDL area	▪ All communities in watershed ▪ County planning commission ▪ County Engineer		▪ Reduction in total runoff ▪ Promotion of increased infiltration	▪ Total number of communities making revisions to municipal codes and regulations concerning street width
b. Install vegetated circles in centers of cul-de-sacs	▪ Action #2: Phase II Storm water programs of the entire Lower Cuyahoga River TMDL area	▪ Builders ▪ Developers ▪ SWCD	▪ Ohio EPA ▪ GLPF ▪ LEPF ▪ CWSRF ▪ PL-566	▪ Reduction in total runoff ▪ Promotion of increased infiltration	▪ Total number of center islands installed ▪ Total square feet of impervious surface removed
c. Conduct workshop for builders and developers emphasizing reduced imperviousness and alternative development designs	▪ Action #3: educational programs of the entire Lower Cuyahoga River TMDL area	▪ Builders ▪ Developers ▪ Home Builders Association ▪ SWCD ▪ NEFCO	▪ Ohio EPA ▪ GLPF ▪ LEPF ▪ CWSRF ▪ PL-566	▪ Developers and builders learn alternative layouts, emphasizing reduced imperviousness ▪ Increased likelihood of developers adopting such practices	▪ Workshop attendance ▪ Participation, questions, comments, and suggestions generated at workshop
Goal 6: Protect current forested areas and promote additional tree planting					
Objective 6.1: Hire a watershed forester or community forester to oversee a comprehensive forest resource management program					
Priority Areas:					
▪ Entire watershed					
▪ Each community in the watershed					
a. Procure funds/taxes from watershed residents or use grant monies to fund forester position		▪ Watershed residents ▪ All communities in watershed	▪ RCA ▪ PL-566	▪ Hired individual with expertise in forestry	▪ Total amount of revenue collected for the establishment of a community forester position
b. Create plan for future protection and restoration of forest resources within the watershed		▪ All communities in watershed	▪ RCA ▪ PL-566	▪ Comprehensive forest plan outlining specific areas of preservation, protection, and replanting ▪ Increased likelihood of	▪ Completion of plan

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Yellow Creek Watershed Action Plan

Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (<i>see page 4 for complete title</i>)	Expected Improvement(s)	Evaluation
				preserving/maintaining existing forest lands	
Goal 6: Protect current forested areas and promote additional tree planting					
Objective 6.2: Preserve current forest areas within watershed					
Priority Areas: Subwatershed 36 ▪ South Fork [17] Subwatershed 37 ▪ Upper Bath Creek [33]			Subwatershed 38 ▪ Upper North Fork [48] Subwatershed 39 ▪ Yellow Creek [64] ▪ Revere Run [66]		
a. Distribute brochures to emphasizing the importance of maintaining forested areas	▪ Action #3: educational programs of the entire Lower Cuyahoga River TMDL area	▪ All communities in watershed ▪ Watershed residents ▪ NEFCO ▪ SWCD	▪ Ohio EPA ▪ RCA ▪ WAWA ▪ PL-566	▪ Watershed residents informed of the importance of maintaining and preserving forest areas	▪ Total number of brochures distributed
b. Solicitation of landowners to donate conservation easements to protect the future integrity of their land		▪ Medina Summit Land Conservancy ▪ NEFCO ▪ SWCD ▪ Watershed residents ▪ All communities in watershed		▪ Donated property ensures future protection of land from development and deforestation	▪ Total number of acres donated as conservation easement
c. Provide landowners with trees for planting on property		▪ All communities in watershed ▪ Watershed residents ▪ SWCD	▪ Ohio EPA ▪ RCA ▪ WAWA ▪ Tree Planting ▪ PL-566	▪ Preservation and augmentation of current forest resources within the watershed	▪ Total number of trees planted
Goal 7: Adopt Conservation Development Practices					
Objective 7.1: Encourage cluster development and open space preservation					
Priority Areas: ▪ Each community in the watershed					
a. Conduct workshop for builders and home buyers focusing on conservation development practices	▪ Action #3: educational programs of the entire Lower Cuyahoga River TMDL area	▪ All communities in watershed ▪ SWCD ▪ County Engineer ▪ Home Builders Association	▪ Ohio EPA ▪ WAWA ▪ PL-566	▪ Builders and developers learn basic conservation development practices ▪ Future adherence of developers and builders to conservation development	▪ Workshop attendance ▪ Participation, questions, comments, and suggestions generated at workshop

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Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (see page 4 for complete title)	Expected Improvement(s)	Evaluation
		<ul style="list-style-type: none"> ▪ Builders ▪ Developers 		practices	
b. Evaluate environmental standards during the development review process		<ul style="list-style-type: none"> ▪ All communities in watershed ▪ County planning commission ▪ Home Builders Association ▪ Builders ▪ Developers 		<ul style="list-style-type: none"> ▪ Adherence to stricter environmental standards by developers and builders ▪ Creation of sustainable communities with storm water management BMPs 	<ul style="list-style-type: none"> ▪ Total number of communities adopting more stringent design review procedures ▪ Total number of developments required to modify plans in order to comply with revised standards
Goal 7: Adopt Conservation Development Practices					
Objective 7.2: Minimize amount of disturbed area with new developments					
Priority Areas:					
<ul style="list-style-type: none"> ▪ Entire watershed 					
a. Conduct workshop for developers and builders stressing minimal clearance and disturbance practices	<ul style="list-style-type: none"> ▪ Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> ▪ All communities in watershed ▪ SWCD ▪ Home Builders Association ▪ Developers ▪ Builders 	<ul style="list-style-type: none"> ▪ Ohio EPA ▪ WAWA ▪ PL-566 	<ul style="list-style-type: none"> ▪ Builders and developers learn methods of minimal clearance and disturbance ▪ Future adherence of developers and builders to such conservation development practices 	<ul style="list-style-type: none"> ▪ Workshop attendance ▪ Participation, questions, comments, and suggestions generated at workshop
b. Clear as few trees as necessary when grading and preparing building sites		<ul style="list-style-type: none"> ▪ All communities in watershed ▪ Home Builders Association ▪ Developers ▪ Builders 		<ul style="list-style-type: none"> ▪ Reduction in amount of cleared trees ▪ Preservation of valuable woodlands and open space 	<ul style="list-style-type: none"> ▪ Total number of trees saved ▪ Total acreage left undisturbed
c. Physically demarcate the area to be disturbed, individually marking which trees will be removed and saved		<ul style="list-style-type: none"> ▪ Builders ▪ Developers 		<ul style="list-style-type: none"> ▪ Reduction in the amount of cleared trees ▪ Preservation of valuable woodlands and open space 	<ul style="list-style-type: none"> ▪ Total number of trees saved ▪ Total acreage left undisturbed
Goal 7: Adopt Conservation Development Practices					
Objective 7.3: Practice “phasing” on large developments and construction projects					
Priority Areas:					
<ul style="list-style-type: none"> ▪ Entire watershed 					
a. Conduct workshop for developers and builders	<ul style="list-style-type: none"> ▪ Action #3: educational 	<ul style="list-style-type: none"> ▪ All communities in watershed 	<ul style="list-style-type: none"> ▪ Ohio EPA ▪ WAWA 	<ul style="list-style-type: none"> ▪ Builders and developers learn about phasing and 	<ul style="list-style-type: none"> ▪ Workshop attendance ▪ Participation, questions,

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Yellow Creek Watershed Action Plan					
Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (see page 4 for complete title)	Expected Improvement(s)	Evaluation
emphasizing phasing and other conservation development practices	programs of the entire Lower Cuyahoga River TMDL area	<ul style="list-style-type: none"> County Engineer Developers Builders 	<ul style="list-style-type: none"> PL-566 	other conservation development practices <ul style="list-style-type: none"> Future adherence to phasing 	comments, and suggestions generated at workshop
b. Divide large construction projects into several small phases	<ul style="list-style-type: none"> Action #2: Phase II Storm water programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> All communities in watershed County Engineer Developers Builders 		<ul style="list-style-type: none"> Reduction in exposed soils Reduction in erosion and sedimentation 	<ul style="list-style-type: none"> Total number of projects adopting phasing practices
c. Revise community building/zoning codes to require phasing for large construction projects	<ul style="list-style-type: none"> Action #2: Phase II Storm water programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> All communities in watershed County planning commission County Engineer Developers Builders 		<ul style="list-style-type: none"> Environmentally-sound guidelines for large future developments and construction sites Increased likelihood of adherence to regulations by builders and developers 	<ul style="list-style-type: none"> Total number of communities making revisions to building and zoning codes Total plans modified to comply with phasing amendments
Goal 8: Increase the understanding, awareness, participation, and cooperation among all stakeholders regarding watershed and water quality issues					
Objective 8.1: Foster greater communication and participation among all stakeholders regarding watershed issues					
Priority Areas: <ul style="list-style-type: none"> Entire Watershed 					
a. Establish a permanent watershed organization to continue addressing important watershed issues	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> NEFCO Watershed residents All communities in watershed County Engineer SWCD Department of Development Ohio EPA ODNR DOES Cuyahoga RAP County Health Department 	<ul style="list-style-type: none"> Ohio EPA LEPF GLPF PL-566 	<ul style="list-style-type: none"> Establishment of a watershed-wide organization with a wide range of stakeholders Outlet for regular discourse on specific watershed issues Opportunity for citizens to actively contribute to improve the watershed Establishment of solid base for future support Increased likelihood for procuring funding for future projects 	<ul style="list-style-type: none"> Development of the group Recruitment of members Participation of members Number of actions and projects completed Number of issues addressed
b. Create Yellow Creek Watershed educational web site containing the	<ul style="list-style-type: none"> Action #3: educational programs of the 	<ul style="list-style-type: none"> NEFCO Watershed residents 	<ul style="list-style-type: none"> Ohio EPA LEPF GLPF 	<ul style="list-style-type: none"> Increased awareness on the issues facing the Yellow Creek Watershed 	<ul style="list-style-type: none"> Number of web site visits Frequency of updates

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Yellow Creek Watershed Action Plan

Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (<i>see page 4 for complete title</i>)	Expected Improvement(s)	Evaluation
latest watershed news, contacts, photos, related links, and other information regarding the watershed	entire Lower Cuyahoga River TMDL area	<ul style="list-style-type: none"> All communities in watershed SWCD Cuyahoga RAP 	<ul style="list-style-type: none"> PL-566 	<ul style="list-style-type: none"> Source of information for contacts, links, and the latest developments and initiatives facing the watershed 	<ul style="list-style-type: none"> Comments, questions, suggestions, and other feedback sent to web site
c. Publish quarterly newsletters to inform watershed residents of current news and issues regarding the Yellow Creek Watershed	<ul style="list-style-type: none"> Action #3: educational programs of the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> NEFCO Watershed residents All communities in watershed SWCD Cuyahoga RAP 	<ul style="list-style-type: none"> Ohio EPA LEPF GLPF PL-566 	<ul style="list-style-type: none"> Periodical updates on latest watershed initiatives Principal publication of the watershed organization 	<ul style="list-style-type: none"> Number of issues published
Goal 9: Establish a storm water utility for the communities within the watershed to fund storm water management endeavors					
Objective 9.1: Create a storm water utility tax based on percent impervious cover					
Priority Areas: <ul style="list-style-type: none"> Entire Watershed Each individual community within the watershed 					
a. Devise a storm water utility fee schedule based on percent imperviousness	<ul style="list-style-type: none"> Action #2: Phase II Storm water for the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed Department of Development County Engineer 		<ul style="list-style-type: none"> Equitable funding mechanism for the operation and maintenance of the storm water infrastructure, engineering and design, and capital improvements Incentive for residents to minimize the amount of impervious cover Ensure compliance with Phase II regulations 	<ul style="list-style-type: none"> Number of communities establishing a storm water utility Feedback from community residents
b. Incorporate GIS, aerial photography and remote sensing technology to determine the amount of impervious cover per parcel	<ul style="list-style-type: none"> Action #2: Phase II Storm water for the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> Watershed residents All communities in watershed Department of Development County Engineer NEFCO 		<ul style="list-style-type: none"> A GIS using aerial photography and remote sensing techniques would provide accurate impervious cover calculations Storm water utility fee schedule based on impervious surface calculations 	<ul style="list-style-type: none"> Successful use of a GIS, aerial photography and remote sensing in determining the amount of impervious surface Implementation of a storm water utility tax based on percent impervious cover

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Yellow Creek Watershed Action Plan

Action	TMDL Action(s)/ Management Measure(s)	Stakeholder(s)	Possible Funding Source(s) (<i>see page 4 for complete title</i>)	Expected Improvement(s)	Evaluation
Goal 9: Establish a storm water utility for the communities within the watershed to fund storm water management endeavors					
Objective 9.2: Create a storm water utility fee structure based on land use category and building/parking lot size					
Priority Areas: <ul style="list-style-type: none"> ▪ Entire Watershed ▪ Each individual community within the watershed 					
a. Devise a storm water utility fee schedule for residential land use based on size of building footprint	<ul style="list-style-type: none"> ▪ Action #2: Phase II Storm water for the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> ▪ Watershed residents ▪ All communities in watershed ▪ Community zoning departments 		<ul style="list-style-type: none"> ▪ Equitable funding mechanism for the operation and maintenance of the storm water infrastructure, engineering and design, and capital improvements ▪ Ensure compliance with Phase II regulations ▪ Commercial/industrial properties taxed higher than individual residences 	<ul style="list-style-type: none"> ▪ Successful implementation of a storm water utility tax based on land use classification and size of building
b. Devise a storm water utility fee schedule for commercial/industrial land use based on area of building and parking lot	<ul style="list-style-type: none"> ▪ Action #2: Phase II Storm water for the entire Lower Cuyahoga River TMDL area 	<ul style="list-style-type: none"> ▪ Watershed residents ▪ All communities in watershed ▪ Community zoning departments 		<ul style="list-style-type: none"> ▪ Equitable funding mechanism for the operation and maintenance of the storm water infrastructure, engineering and design, and capital improvements ▪ Ensure compliance with Phase II regulations ▪ Commercial/industrial properties taxed higher than individual residences 	<ul style="list-style-type: none"> ▪ Successful implementation of a storm water utility tax based on land use classification and size of building and parking lot

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Priority Area Index

Map ID	Location	Sub Watershed	Community	Action
1	Ridgewood Rd.	36	Sharon Township	Preserve forested area that has erodible soils
2	S. Medina Line Rd., north of Ridgewood Rd.	36	Sharon Township	Preserve forested area that has erodible soils
3	State Route 18, west of S. Medina Line Rd.	36	Sharon Township	Restore unforested area that has erodible soils
4	State Route 18, west of State Rd.	36	Granger Township	Preserve forested groundwater recharge area
5	State Route 18/N. Medina Line Rd./ Dunsha Rd.	36	Granger Township	Restore unforested area that has erodible soil
6	West Fork, west of State Rd.	36	Granger Township	Restore stream channel; plant riparian vegetation
7	West Fork tributary, west of State Rd.	39	Granger Township	Restore stream channel; plant riparian vegetation
8	West Fork, east of Dunsha Rd.	36	Granger Township	Restore stream channel; plant riparian vegetation
9	South Fork at Swan Lake Dr.	36	Copley Township	Restore stream channel; plant riparian vegetation
10	Swan Lake Dr.	36	Copley Township	Preserve forested groundwater recharge area
11	State Route 18, south to Westmont Dr.	36	Copley Township	Preserve forested groundwater recharge area
12	South of State Route 18, west of South Fork	36	Copley Township	Restore unforested groundwater recharge area
13	South Fork at State Route 18	36	Bath Township	Restore stream channel; plant riparian vegetation
14	Akron General Medical Center, Crystal Lake Rd.	36	Bath Township	Reduce imperviousness
15	Idlebrook Dr.	36	Bath Township	Preserve forested groundwater recharge area
16	Rolling View Dr./Melody Dr.	36	Bath Township	Preserve forested groundwater recharge area
17	South Fork	36	Bath Township	Preserve forested area
18	Barnsleigh Rd.	36	Bath Township	Preserve forested groundwater recharge area
19	West Fork at Heatherleigh Dr.	36	Bath Township	Restore stream channel; plant riparian vegetation
20	Granger Rd., between Heatherleigh Dr. and Hametown Rd.	36	Bath Township	Restore unforested groundwater recharge area
21	Lois Rd./Hametown Rd.	36	Bath Township	Preserve forested groundwater recharge area
22	Granger Rd., north to S. Lakespur	36	Bath Township	Preserve forested area that erodible soils
23	West Fork, Shaw Rd. to Crystal Lake Rd.	36	Bath Township	Restore stream channel; plant riparian vegetation

Map ID	Location	Sub Watershed	Community	Action
24	Shaw Rd./Spring Water Dr./Crystal Lake Rd.	36	Bath Township	Preserve forested area that has erodible soils
25	Hughstowne Dr.	36	Bath Township	Restore unforested area that has erodible soils
26	Shaw Rd., east of Hametown Rd.	36	Bath Township	Preserve forested area that has erodible soils
27	Bath Creek, south of Bath Rd.	37	Bath Township	Restore stream channel; plant riparian vegetation
28	Bath Nature Preserve	37	Bath Township	Restore unforested area that has erodible soils
29	Hametown Rd., south of Ira Rd.	37	Bath Township	Restore unforested area that has erodible soils
30	Bath Creek, Ira Rd. south to Derrwood Dr.	37	Bath Township	Restore stream channel; plant riparian vegetation
31	Ira Rd./Hametown Rd.	37	Bath Township	Preserve forested area that has erodible soils
32	Bath Creek Tributary, west of Hametown Rd.	37	Bath Township	Restore stream channel; plant riparian vegetation
33	Upper Bath Creek	37	Bath Township	Preserve forested area
34	Bath Creek, north of Everett Rd.	37	Richfield Township	Restore stream channel; plant riparian vegetation
35	Everett Rd., south of I-271	37	Richfield Township	Preserve forested area that has erodible soils
36	Bath Center	38	Bath Township	Reduce parking lot size; reduce imperviousness
37	Bath Rd./Cleveland-Massillon Rd.	38	Bath Township	Restore unforested groundwater recharge area
38	North Fork, Cleveland-Massillon Rd./R.B. Stout property	38	Bath Township	Restore stream channel; plant riparian vegetation
39	North Fork, west of Cleveland-Massillon Rd.	38	Bath Township	Preserve forested groundwater recharge area
40	North Fork tributary, west of Cleveland-Massillon Rd.	38	Bath Township	Restore stream channel; plant riparian vegetation
41	North Fork, south of Ira Rd.	38	Bath Township	Restore stream channel; plant riparian vegetation
42	North of Ira Rd., east of North Fork	38	Bath Township	Restore unforested area that has erodible soils
43	North of Ira Rd., west of North Fork	38	Bath Township	Restore unforested area that has erodible soils
44	Everett Rd., east of North Fork	38	Bath Township	Preserve forested area that has erodible soils
45	Everett Rd., west of Cleveland-Massillon Rd.	38	Bath Township	Preserve forested area that has erodible soils
46	Everett Rd., west of North Fork	38	Bath Township	Restore unforested groundwater recharge area
47	Richfield trucking area, Brecksville Rd.	38	Richfield Village	Reduce parking lot size; reduce imperviousness

Map ID	Location	Sub Watershed	Community	Action
48	Upper North Fork	38	Richfield Village	Preserve forested area
49	North Fork, south of Hawkins Rd., east of Roberts Dr.	38	Richfield Village	Restore stream channel; plant riparian vegetation
50	Summit Mall area	39	Fairlawn	Reduce parking lot size; reduce imperviousness
51	Ghent Rd.	39	Akron	Reduce parking lot size; reduce imperviousness
52	Lake of the Woods Dr.	39	Akron	Restore stream channel; plant riparian vegetation
53	Springside Dr.	39	Bath Township	Reduce parking lot size; reduce imperviousness
54	Embassy Pkwy.	39	Fairlawn	Reduce parking lot size; reduce imperviousness
55	Sourek Rd./Berrywood Dr.	39	Bath Township	Preserve forested groundwater recharge area; preserve forested area that has erodible soils
56	Ghent Rd., north side	39	Bath Township	Preserve forested groundwater recharge area
57	West Point Dr./Sourek Run	39	Bath Township	Preserve forested area that has erodible soils
58	Yellow Creek, east of I-77	39	Bath Township	Plant riparian vegetation
59	Wye Rd./Sanctuary Rd.	39	Bath Township	Restore unforested area that has erodible soils
60	Ghent Village	39	Bath Township	Reduce parking lot size; reduce imperviousness
61	North Fork, confluence with Yellow Creek	38	Bath Township	Restore stream channel; plant riparian vegetation
62	South Revere Run	39	Bath Township	Preserve forested area that has erodible soils
63	Yellow Creek, at Yellow Creek Rd.	39	Bath Township	Restore stream channel; plant riparian vegetation
64	Yellow Creek	39	Bath Township	Preserve forested area
65	Round Hill Dr.	39	Bath Township	Restore unforested area that has erodible soils
66	Revere Run	39	Bath Township	Preserve forested area
67	Yellow Creek, north of Bath Rd.	39	Cuyahoga Falls	Restore stream channel; plant riparian vegetation
68	Bath Rd./Cynthia Ln.	39	Cuyahoga Falls	Preserve forested area that has erodible soils
69	North Revere Run	39	Bath Township	Preserve forested area that has erodible soils
70	Revere Rd./Brookview Dr.	39	Bath Township	Restore unforested area that has erodible soils